WHAT IS CLAIMED IS:

1. An access device for supporting a variable data layer, the access device comprising:

a user access processing module unit having an analog/digital access processing unit and a local area network access processing unit;

a central control processing module unit connected to the user access processing module unit and having:

a voice processing unit for compressing or restoring voice data to be processed in or inputted to the user access processing module unit;

a time division multiplexing switching unit for performing voice data switching between the analog/digital access processing unit of the user access processing module unit and the voice processing unit; and

a processor module unit for controlling the voice processing unit and the time division multiplexing switching unit; and

a wide area network access processing module unit connected to the user access processing module unit and the central control processing module unit, the wide area network access processing module unit having:

a frame conversion processing unit comprising

a framer/deframer for transmitting/receiving ATM cells from the central control processing module unit through a first bus, and forming and extracting xDSL frames;

an encoder/decoder unit for converting the xDSL frame into a signal usable in an external xDSL network, or the signal from the external xDSL network; and

a physical access unit for performing physical layer access interface.

2. The access device of claim 1, wherein the central control processing module unit has a UTOPIA bus interface unit to communicate with the wide area network access processing module unit

3. The access device of claim 1, wherein the first bus is a UTOPIA bus.

4. An access device for supporting a variable data layer including first and second external networks, the access device comprising:

a user access processing module unit connected to the first external network;

a central control processing module unit connected to the user access processing module unit for processing data received from the first external network; and

a wide area network access processing module unit connected to the user access processing module unit and the central control processing module unit, the wide area network access processing module unit communicating with the second external network and having:

a frame conversion processing unit connected to the second external network for receiving therefrom a signal and transforming the signal into ATM cells useable by the central control processing module.

5. The access device of claim 4, the wide area network access processing module further comprising a physical access unit for performing physical layer access interface.

6. The access device of claim 4, the frame conversion processing unit further comprising

a framer/deframer for transmitting/receiving the ATM cells from the central control processing module unit through a first bus, and forming and extracting xDSL frames; and

an encoder/decoder unit for converting xDSL frames into the signal usable in the second external network, or the signal from the second external network.

7. The access device of claim 6, wherein the first bus is a UTOPIA bus.

8. The access device of claim 4, wherein the second external network is an xDSL network.

9. The access device of claim 4, wherein the user access processing module unit comprises:

an analog access processing unit for processing an analog input data;

a digital access processing unit for processing a digital input data; and

a local area network access processing unit for communicating 10 Base-T physical layer data.

10. The access device of claim 9, wherein the central control processing module unit comprises:

a voice processing unit for compressing or restoring voice data to be processed in or inputted to the user access processing module unit;

a time division multiplexing switching unit for performing voice data switching between the analog access processing unit and the digital access processing unit of the user access processing module unit and the voice processing unit; and

a processor module unit for controlling the voice processing unit and the time division multiplexing switching unit.

11. The access device of claim 9, wherein the analog access processing unit is connected to the time division multiplexing switching unit via a TDM bus.

12. The access device of claim 9, wherein the digital access processing unit is connected to the time division multiplexing switching unit via a TDM bus.

13. The access device of claim 9, wherein the digital access processing unit is connected to the frame conversion processing unit via a HPI bus.

14. The access device of claim 13, wherein the central control processing module unit is connected to the frame conversion processing unit via a UTOPIA bus.

15. The access device of claim 14, wherein the central control processing module unit comprises:

a time division multiplexing switching unit for switching TDM buses used to communicate with the analog access processing unit and the digital access processing unit, a voice signal processed in the user access processing module unit being transmitted through the TDM buses;

a voice processing unit for compressing the voice signal to be transmitted to the second external network, and restoring a compressed voice signal from the second external network according to control information from the processor module unit; and

a processor module unit having

a CPU for forming the compressed voice signal, voice compression/restoring information and destination information as IP packets, when transmitting the voice signal to the 10 Base-T physical layer, extracting the compressed voice signal, voice compression/restoring information and destination information from the IP packet, when receiving the voice signal, dividing the IP packet into ATM cells for access to the second external network, or extracting the IP packet by re-combining the ATM cells;

a memory for storing information processed by the CPU;

a peripheral logic for defining an initial operation of the CPU; and

a programmable logic device for performing interface between the HPI bus and the UTOPIA bus.

16. The access device of claim 15, wherein the frame conversion processing unit has

a framer/deframer unit for converting the ATM cell received through the programmable logic device of the processor module unit and the UTOPIA bus into the xDSL frame, or converting the xDSL frame into the ATM cell; and

an encoding/decoding unit for converting the xDSL frame.

17. The access device of claim 6, wherein the user access processing module unit comprises:

an analog access processing unit for processing an analog input data;

a digital access processing unit for processing a digital input data; and

a local area network access processing unit for communicating 10 Base-T physical layer data.

18. The access device of claim 17, wherein the central control processing module unit comprises:

a voice processing unit for compressing or restoring voice data to be processed in or inputted to the user access processing module unit;

a time division multiplexing switching unit for performing voice data switching between the analog access processing unit and the digital access processing unit of the user access processing module unit and the voice processing unit; and

a processor module unit for controlling the voice processing unit and the time division multiplexing switching unit.